Remarks:

A.   *Rejection of Claims Over Savitzky or Savitzky and Brumley*

The Office Action has rejected pending claims 1 and 2 under § 102(e) over U.S. Patent No. 5,732,261 (Savitzky). Applicants respectfully traverse this rejection. The Office Action states that Savitzky discloses "defining a plurality of hardware devices as a plurality of objects," citing col. 2 lns. 66 and 67 of Savitzky. However Savitzky does not disclose this element of claim 1, as instead Savitzky relates to "software objects describing services for one of the plurality of remote machines" Savitzky, col. 2 lns. 66 and 67 (emphasis added). Because Savitzky does not disclose, at least, "defining a plurality of hardware devices as a plurality of objects," claim 1 and claim 2 depending therefrom are patentably distinguished over Savitzky.

Claim 2 is further patentable, as nowhere does Savitzky disclose "assigning a plurality of properties to the plurality of hardware devices nor "assigning a plurality of methods to the plurality of hardware devices", at least for the reasons discussed above.

With respect to the rejection of claims 3-5 under 35 U.S.C. § 103(a) over Savitzky in view of U.S. Patent No. 5,926,775 (Brumley), Applicants respectfully traverse the rejection, at least because Savitzky does not disclose the elements of claims 1 and 2 from which claims 3-5 depend, the combination cannot render claims obvious.

B.   *Rejection of Claims Under Brumley or Brumley and Morris*

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The Office Action has rejected pending claims 6—15 under 35 U.S.C. § 102(e) over U.S. Patent No. 5,926,775 (Brumley) Applicants respectfully traverse this rejection. With respect to claim 6, nowhere does Brumley disclose a medium storing instructions to "manipulate a redundant array of independent disks modeled by the plurality of objects" as recited by claim 6. For at least this reason, claim 6 and claims 7-10 depending therefrom are patentable over Brumley.

With respect to claim 11, Applicants respectfully disagree that Brumley discloses a software program which "models the plurality of hardware devices as a plurality of objects, wherein the plurality of objects comprise a plurality of methods and a plurality of properties". In this regard, neither col. 3, lns. 21-28 cited by the Office Action nor the cited figures 2-4, 7 and 11-13 disclose such modeling of a plurality of objects comprising a plurality of methods and a plurality of properties. For at least these reasons, claim 11 and claims 12-15 depending therefrom patentably distinguish over Brumley.

With respect to claims 16-21, which stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Brumley in view of U.S. Patent No. 5,877,966 (Morris), Applicants respectfully traverse the rejection. This rejection is improper at least because there is no suggestion or motivation to combine the references. Brumley relates to software architecture for a data acquisition system, whereas Morris relates to a configurator and use thereof to generate configurations. As such there is no motivation to combine these references from disparate fields.

More so, the portion of Morris cited, namely figure 2 and col. 5, lns. 29-39 and 54-57, merely relate to creating a configuration of a personal computer having a hard disk drive contained therein. Nowhere does Morris teach or suggest software which "models the plurality of disks as a plurality of

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·disk objects" nor "provides a plurality of tools for performing a plurality of operations on a plurality of disk objects" nor "invokes a response by the plurality of disks to the plurality of operations performed on the plurality of disk objects". Nor, as admitted by the Office Action, does Brumley. For at least these reasons, claim 16 and claims 17-21 depending therefrom patentably distinguish over the proposed combination.

C.   Objection to the Drawings

The Office Action has rejected to various drawings. Enclosed herewith are proposed drawing corrections for Figures 5 and 12. Further, the amendments to the specification conform to the drawings. Applicants respectfully submit that these proposed drawing corrections and amendments overcome the objection to the drawings.

D.   Rejection of Claims Under 35 U.S.C. § 112

The Office Action has rejected pending claims 1-17 and 19-21 under 35 U.S.C. § 112 as lacking enablement. Applicants respectfully traverse the rejection.

In sum, it appears that the Office Action asserts that this alleged lack of enablement "relates to a lack of substantive detail pertaining to the claimed features." Office Action, page 3. However, this is not the test for enablement under 35 U.S.C. § 112. Instead, an applicant need only provide a written description that permits one of ordinary skill in the art to make and use the invention with out undue experimentation. *In re Wands*, 8 USPQ2d 1400 (Fed. Cir. 1988).

More so, the Office Action "does not provide any factors, reasons, or evidence" that the specification fails to comply

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·with §112. Instead, the Office Action merely cites portions of the specification and conclusorily states that the "specification does not support in sufficient and clear detail…and is therefore not enabled." *E.g.*, Office Action, p.9. As such, the rejection is improper and Applicants respectfully request that this ground of rejection to claims 1-17 and 19-21 be removed.
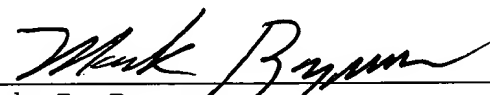
Further, as is well known, one of ordinary skill in the software arts would be able to make and use many different implementations to perform the claimed methods, systems and articles, and would not require "undue experimentation".

As to the rejection of claim 4 under §112, second paragraph, Applicants have amended the claim in accordance with the suggestions in the Office Action.

In view of these remarks, the application is now in condition for allowance and the Examiner's prompt action in accordance therewith is respectfully requested. The Commissioner is authorized to charge any additional fees or credit any overpayment to Deposit Account No. 20-1504.

Respectfully submitted,

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Mark J. Rozman
Registration No. 42,117
TROP, PRUNER & HU, P.C.
8554 Katy Freeway, Suite 100
Houston, Texas 77024-1805
(512) 418-9944 [Phone]
(713) 468-8883 [Fax]

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In the Specification:

Page 12, Lines 13-22:

In one embodiment of the invention, each of the RAID objects 30a includes methods 32, properties 34 and events 36, which are consistent with the particular hardware features these objects 30a model. In Figure 7, for example, the controller object 100 includes a method 102, used to reset the controller of the RAID hardware devices 17a. Likewise, the controller object 100 includes properties 34, such as a bus counting method 103, used to report the number of buses on the controller, and a disk counting method 104, for reporting the number of disks on the controller, <u>an array counting method 105 and a volume counting method 106 to report on the number of arrays and volumes on the controller, respectively</u>. Each of the properties 34 is accessible to the RAID software 12a for communicating with the controller of the RAID hardware devices 17a.

Page 13, Lines 19-26:

In Figures 10 and 11, the array object 130 and the volume object 140, like the disk object 120, include methods 32, properties 34 and events 36. In one embodiment of the invention, the array is defined as a physical grouping of one or more disks. Accordingly, the array object 130 includes a method 131 to create an array and a method 132 to expand an array. A disk count property 134 enables the RAID software 12a to identify the number of disks 120 included in the array 130. A volume degraded event [169] <u>180</u> permits the RAID software 12a to

receive notification when a volume 140 of the array 130 has degraded.

In the Claims:

1   4. (Amended)   The method of claim 3, wherein providing a
2 plurality of tools to perform operations on the plurality of
3 objects further comprises:
4   providing a function for invoking a method of an object;
5   providing a function for setting [a property] an attribute
6 of an object; and
7   providing a function for retrieving [a property] an
8 attribute of an object.

1   6. (Amended)   An article comprising a medium storing
2 instructions that cause a processor-based system to:
3   receive a request from a software program;
4   act upon a plurality of objects based upon the request
· 5 received; and
6   manipulate a [plurality of hardware devices] redundant
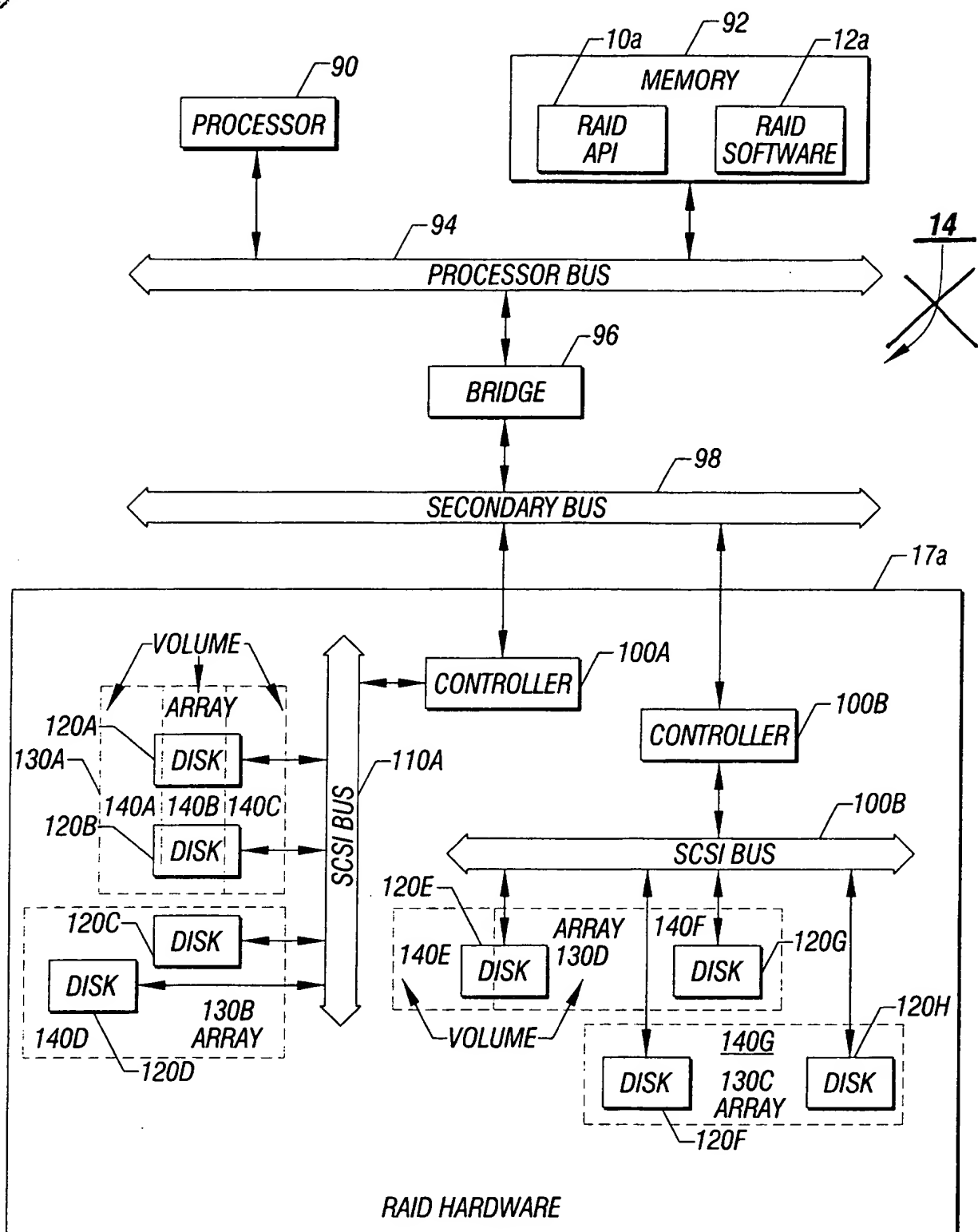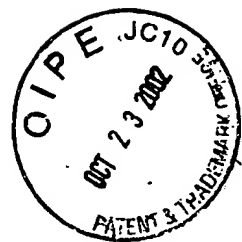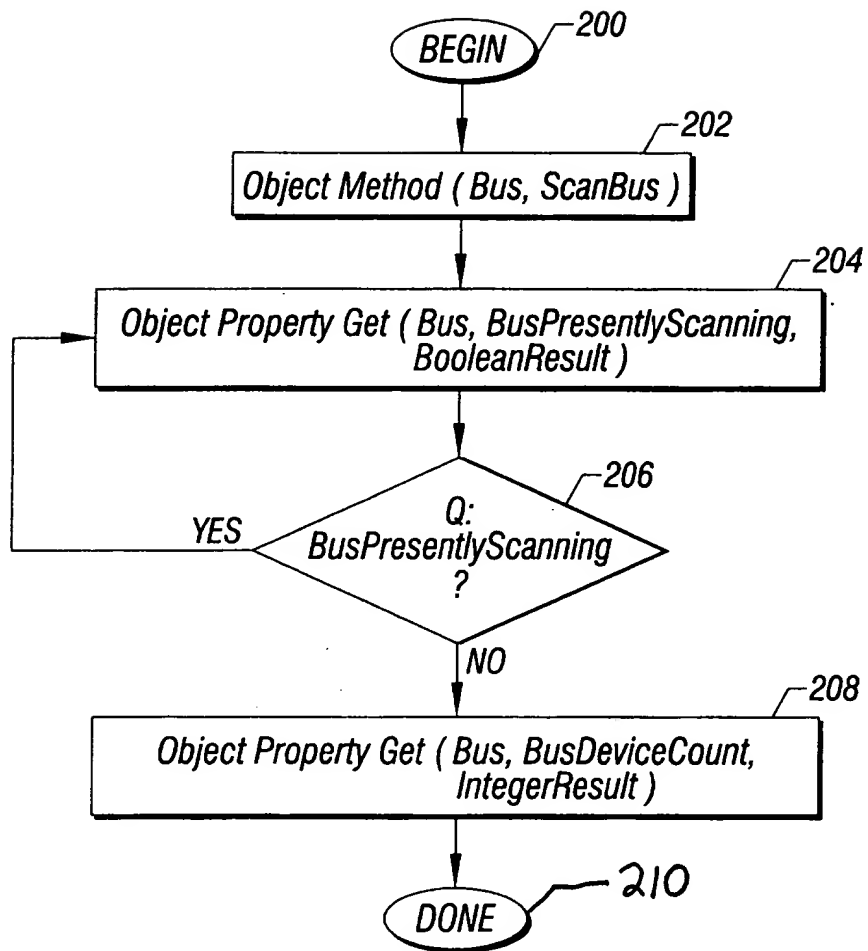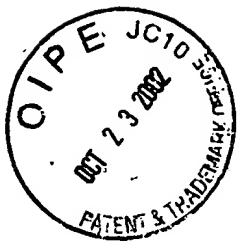7 array of independent disks modeled by the plurality of objects.

FIGURE 5

BEGIN /—200

Object Method (Bus, ScanBus) /—202

Object Property Get (Bus, BusPresentlyScanning, BooleanResult) /—204

Q: BusPresentlyScanning ? /—206

YES

NO

Object Property Get (Bus, BusDeviceCount, IntegerResult) /—208

DONE /—210

FIGURE 12